

Leavenworth NFH adult formalin treatment 8/17/2016

Provided by: Chris Foster (Biologist)

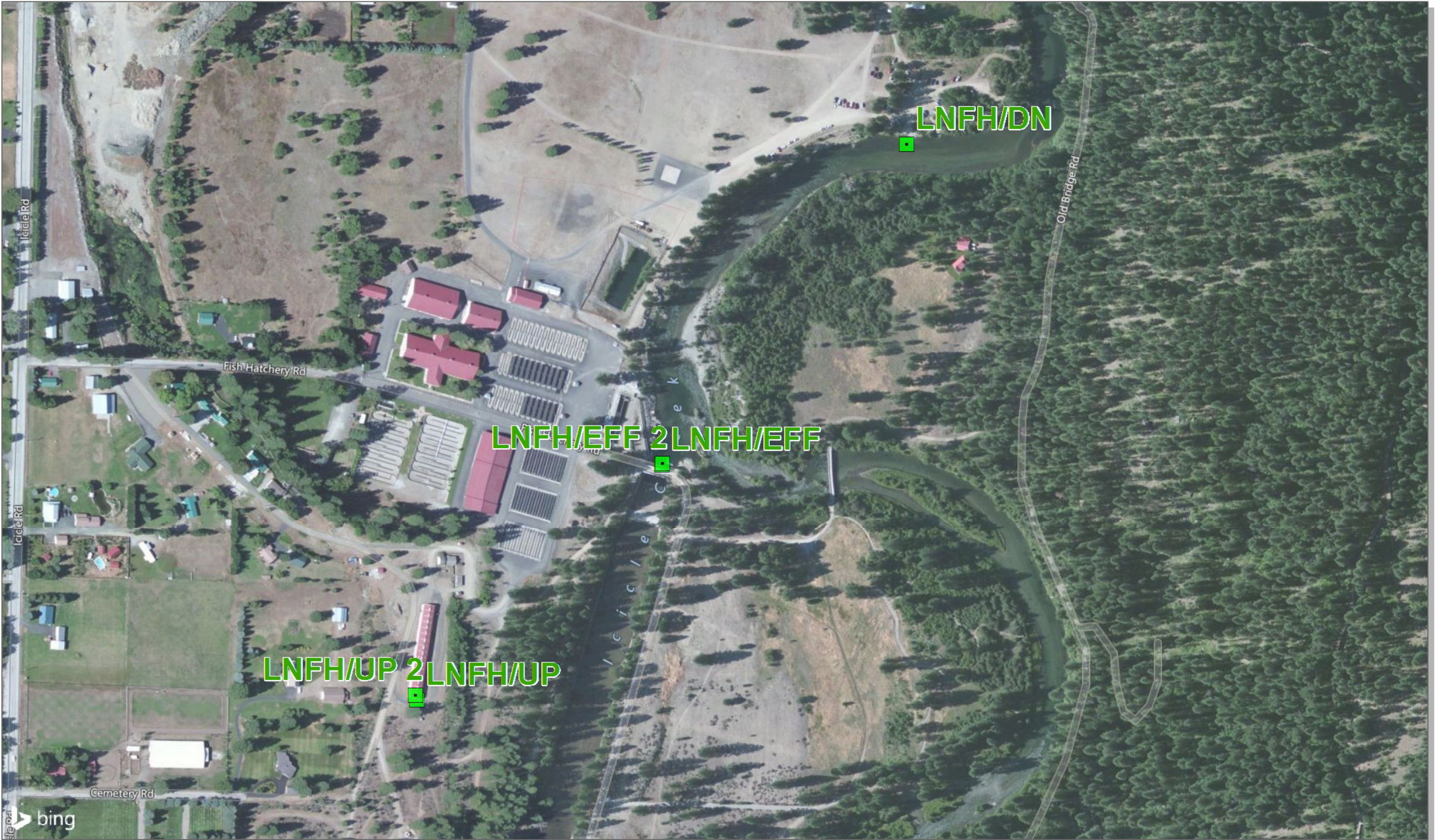
Oncorhynchus tshawytscha

Sping Chinook Salmon Adults (~1000)

Adult Ponds

Length	153'
Width	15'
Avg. depth	3.618'
Ft ³	8303
Gallons	62106
# of adult ponds	2
Total volume (gal)	124213
Flow duing treatment (gpm)	1179
turnover time (minutes)	105.3545377
turnover time (hrs)	1.755908962
Treatment start time	9:00
Treatment end time	10:00
Treatment length	1 hour
Treatment type	Flow through (drip)
Treatment concentration	200ppm
Total formalin used (gal)	14.14
Equipment used	
Cole-Parmer Masterflex L/S	7523-80
Masterflex tubing	06424-36
Western chemical	Parasite-S
Discharge	
Adult ponds via fish ladder (gpm)	1179
Rearing ponds (gpm)	17232
*Total discharge under the bridge (gpm)	18411

*combination of surface and ground water



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Leavenworth National Hatchery



EPA R10 Lab (MEL) COC (REGION COPY)

DateShipped: 8/18/2016

CarrierName: Hand Delivered

CHAIN OF CUSTODY RECORD

Formaldehyde NW Aquaculture/WA

Project Code: WTR-184A

1 of 1

No: 10-081116-165338-0005

20162017B10P202BD4X24

Contact Name: Jed Januch

Contact Phone: (360) 871-8731

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
16334100		Surface Water Total/ J Januch	Composite	Form(8 Weeks)	N1 (None) (1)	LNfH1influent	08/17/2016 12:34	Field Sample
16334101		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None), N2 (None), N3 (None) (3)	LNfH2effluent	08/17/2016 08:26	Field Sample
16334102		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 08:46	Field Sample
16334103		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 09:06	Field Sample
16334104		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 09:26	Field Sample
16334105		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 09:46	Field Sample
16334106		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 10:06	Field Sample
16334107		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 10:26	Field Sample
16334108		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 10:46	Field Sample
16334109		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 11:06	Field Sample
16334110		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 11:26	Field Sample

Sample(s) to be used for Lab QC: 16334101 Tag N1, 16334101 Tag N2, 16334101 Tag N3	Shipment for Case Complete? Y
	Samples Transferred From Chain of Custody #
Analysis Key: Form=Formaldehyde	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt

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16334111		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 11:46	Field Sample
16334112		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 12:06	Field Sample
16334113		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 12:26	Field Sample
16334114		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 12:46	Field Sample
16334116		Surface Water Total/ J Januch	Composite	Form(8 Weeks)	N1 (None) (1)	LNfH3rw	08/17/2016 13:45	Field Sample
16334117		Water/ J Januch	Grab	Form(8 Weeks)	N1 (None) (1)	Blank	08/17/2016 08:05	QC Blank - Rinsate/Equipment
16334118		Surface Water Total/ J Januch	Discrete Interval	Form(8 Weeks)	N1 (None) (1)	LNfH2effluent	08/17/2016 09:46	Field Duplicate

Special Instructions:	Shipment for Case Complete? Y
	Samples Transferred From Chain of Custody #
Analysis Key: Form=Formaldehyde	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt

Leavenworth National Fish Hatchery – Results

Outfall sample

Measurement Descr	Result	Units	Remark
Ammonia	0.25	ppm	
chlorine	0	ppm	Used hatchery kit
Formaldehyde test strip	0	ppm	

Outfall Sample

Water Sampling: Sample # 16334101

Sample Details	Water Quality	Measurements	Analysis
Turbidity (ntu)	<input type="text" value="2.04"/>		
Temp (C)	<input type="text" value="14.73"/>		
pH	<input type="text" value="7.36"/>		
Conductivity	<input type="text" value="0.076"/>	Conductivity Units	<input type="text" value="mS"/>
Diss O2	<input type="text" value="8.05"/>	Diss O2 Units	<input type="text" value="ppm"/>
ORP (mv)	<input type="text"/>		
Salinity	<input type="text"/>		

Results – All Samples – cross reference custody sheet for sample locations

SAMPLE_ID	CAS_NUMBER	ANALYTE	FINAL_RESULT	RESULT_UNITS	FINAL_VALIDATION_QUALIFIER
16334100	50-00-0	Formaldehyde	20	ug/L	U
16334101	50-00-0	Formaldehyde	20	ug/L	U
16334102	50-00-0	Formaldehyde	20	ug/L	U
16334103	50-00-0	Formaldehyde	20	ug/L	U
16334104	50-00-0	Formaldehyde	20	ug/L	U
16334105	50-00-0	Formaldehyde	490	ug/L	
16334106	50-00-0	Formaldehyde	1900	ug/L	
16334107	50-00-0	Formaldehyde	2200	ug/L	
16334108	50-00-0	Formaldehyde	2400	ug/L	
16334109	50-00-0	Formaldehyde	960	ug/L	
16334110	50-00-0	Formaldehyde	330	ug/L	
16334111	50-00-0	Formaldehyde	20	ug/L	U
16334112	50-00-0	Formaldehyde	20	ug/L	U
16334113	50-00-0	Formaldehyde	20	ug/L	U
16334114	50-00-0	Formaldehyde	20	ug/L	U
16334116	50-00-0	Formaldehyde	220	ug/L	